

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 450 (DEFENSE HIGHWAY) AND HOUSLEY ROAD IN ANNE ARUNDEL COUNTY, MARYLAND. MODIFICATIONS INCLUDE THE INSTALLATION OF 16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEADS AND AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTONS FOR THE EAST AND WEST LEGS OF MD 450 AND THE NORTH AND SOUTH LEGS OF HOUSLEY ROAD. MD 450 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 450 APPROACHES OPERATING CONCURRENTLY AND THE HOUSLEY ROAD APPROACHES OPERATING CONCURRENTLY. EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR EASTBOUND AND WESTBOUND MD 450.

NEW ALTERNATE ACTUATED PEDESTRIAN PHASING WITH AUDIBLE PUSHBUTTONS WILL BE PROVIDED ACROSS THE EAST AND WEST LEGS OF MD 450 AND THE NORTH AND SOUTH LEGS OF HOUSLEY ROAD.

APS MESSAGE FOR CROSSING MD 450 (DEFENSE HIGHWAY):

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE "WAIT TO CROSS DEFENSE AT HOUSLEY, WAIT".
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

APS MESSAGE FOR CROSSING HOUSLEY ROAD:

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE "WAIT TO CROSS HOUSLEY AT DEFENSE, WAIT".
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

CONTROLLER REQUIREMENTS

THE EXISTING NEMA SIZE '6' BASE MOUNTED CABINET AND EIGHT-PHASE CONTROLLER AND ALL ASSOCIATED EQUIPMENT WILL CONTINUE TO BE USED. A 2-WIRE CENTRAL CONTROL UNIT WILL BE ADDED TO THE CABINET.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY SHA:

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
9571	8	SF	SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN
			- 4 EACH R10-3(1) "DEFENSE HIGHWAY" - (9"x15")
			- 4 EACH R10-3(1) "HOUSLEY ROAD" - (9"x15")

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. LEE STARKLOFF  
DISTRICT ENGINEER  
PHONE: (410) 841-1001

MS. KIMBERLY TRAN  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (410) 841-1019

MR. JOSEPH GECKLE  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (410) 841-1013

MR. ED RODENHIZER  
SUPERVISOR - SIGNAL SHOP  
PHONE: (410) 787-7650

MR. MIKE STOCKER  
SUPPLY OFFICE IV (SIGNAL SHOP WAREHOUSE)  
PHONE: (410) 787-7696

MR. MIKE HUBER  
DISTRICT UTILITY ENGINEER  
PHONE: (410) 841-1039

MR. CORREN JOHNSON  
CHIEF TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630

MR. EUGENE BAILEY  
CHIEF - SIGN OPERATIONS SECTION  
PHONE: (410) 787-7670

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

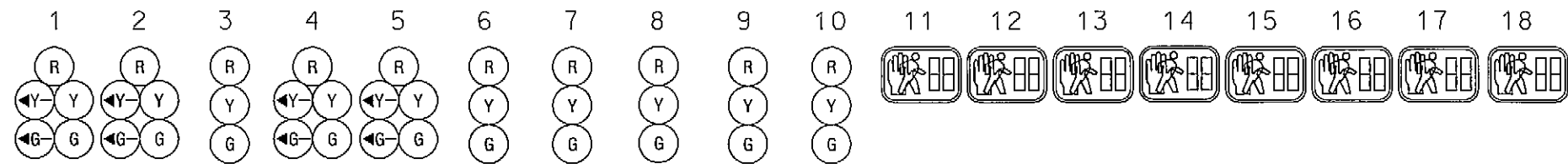
ITEM NO.	QUANTITY	UNIT	DESCRIPTION
1001	1	EA	MAINTENANCE OF TRAFFIC
2002	4	CY	TEST PIT EXCAVATION
5003	1700	LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS
5004	600	LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
6001	20	LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	200	SF	5 INCH CONCRETE SIDEWALK
8002	1	EA	2-WIRE APS CENTRAL CONTROL UNIT
8008	8	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8009	8	EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8018	8	EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
8043	175	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8045	8	SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8047	150	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8058	1100	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8060	1150	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA:

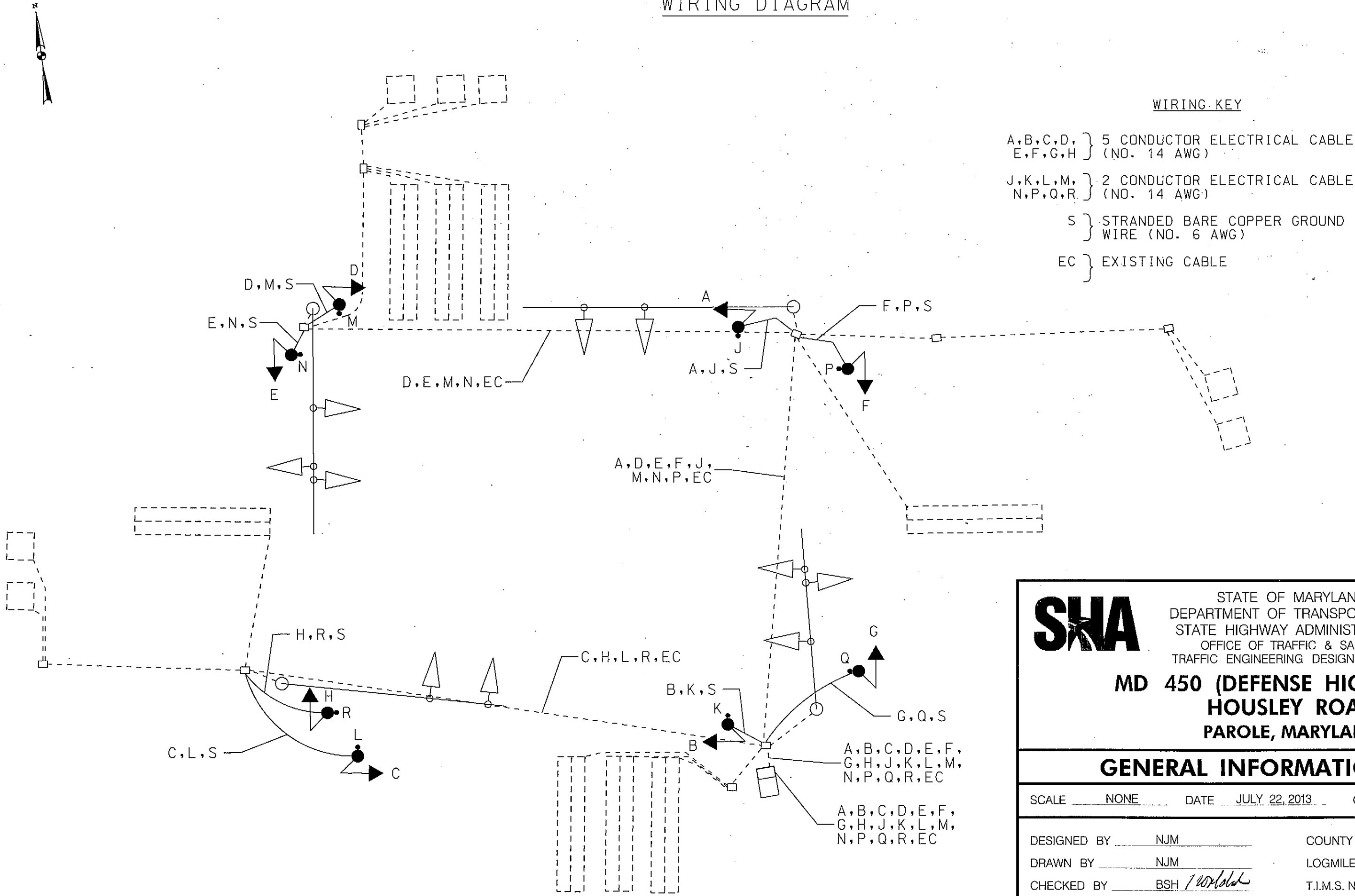
NONE.

PHASE CHART



PHASE 1 + 5	←G/R	←G/R	R	←G/R	←G/R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
1 + 5 CHANGE	1 + 5 MAY CHANGE TO PHASE 1 + 6, PHASE 2 + 5, OR PHASE 2 + 6																	
PHASE 1 + 6	←G/G	←G/G	G	R	R	R	R	R	R	R	DW	W	W	DW	DW	DW	DW	DW
1 + 6 CHANGE	←Y/G	←Y/G	G	R	R	R	R	R	R	R	DW	W	W	DW	DW	DW	DW	DW
PHASE 2 + 5	R	R	R	←G/G	←G/G	G	R	R	R	R	W	DW	DW	W	DW	DW	DW	DW
2 + 5 CHANGE	R	R	R	←Y/G	←Y/G	G	R	R	R	R	W	DW	DW	W	DW	DW	DW	DW
PHASE 2 + 6	G	G	G	G	G	G	R	R	R	R	W	W	W	W	DW	DW	DW	DW
PED CLEARANCE	G	G	G	G	G	G	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW
2 + 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 + 8	R	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	DW	DW	DW	DW
4 + 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 ALT + 8 ALT	R	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	W	W	W	W
PED CLEARANCE	R	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
4 ALT + 8 ALT CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM



SHA

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

MD 450 (DEFENSE HIGHWAY) AT  
HOUSLEY ROAD  
PAROLE, MARYLAND

GENERAL INFORMATION SHEET

SCALE	NONE	DATE	JULY 22, 2013	CONTRACT NO.	XY1395185
DESIGNED BY	NJM	COUNTY	ANNE ARUNDEL		
DRAWN BY	NJM	LOGMILE	02045008.83		
CHECKED BY	BSH	T.I.M.S. NO.	L684		
F.A.P. NO.		T.O.D. NO.			
T.S. NO.	3550A-GI	SG-020F	SG-02	SHEET NO.	5 OF 5